



PTO/SB/08A (07-06)

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/663,299
		Filing Date	September 15, 2003
		First Named Inventor	Liu, Haichao
		Art Unit	1621
		Examiner Name	Karl Puttlitz
Attorney Docket Number	02307V-139100US		
Sheet	1	of	2

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-			
	AB	US-			
	AC	US-			
	AD	US-			
	AE	US-			
	AF	US-			
	AG	US-			
	AH	US-			
	AI	US-			
	AJ	US-			
	AK	US-			
	AL	US-			
	AM	US-			
	AN	US-			
	AO	US-			
	AP	US-			
	AQ	US-			
	AR	US-			

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
KP	AS	JP	H4-222884		03-08-94	Mitsui Toatsu Chemicals, Inc.	(English translation)	<input type="checkbox"/>
	AT							<input type="checkbox"/>
	AU							<input type="checkbox"/>
	AV							<input type="checkbox"/>
	AW							<input type="checkbox"/>

Examiner Signature	/Karl Puttlitz/	Date Considered	01/08/2007
-----------------------	-----------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (08-03)

Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/633,299
		Filing Date	September 15, 2003
		First Named Inventor	Liu, Haichao
		Art Unit	1621
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	02307V-139100US
Sheet	1	of	2

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
KP	AA	US-4,149,009	04-10-1979	Yoneoka et al.	
	AB	US-4,216,339	08-05-1980	Couteau et al.	
	AC	US-4,232,171	11-04-1980	Yoneoka et al.	
	AD	US-4,319,037	03-09-1982	Yoneoka	
	AE	US-4,480,122	10-30-1984	Horlenko et al.	
	AF	US-4,613,411	09-23-1986	Hsu et al.	
	AG	US-4,778,923	10-18-1988	Aplin et al.	
	AH	US-4,994,603	02-19-1991	Mueller et al.	
	AI	US-5,026,904	06-25-1991	Lodge et al.	
	AJ	US-5,144,062	09-01-1992	Chen et al.	
	AK	US-5,194,675	03-16-1993	Joerg et al.	
	AL	US-5,223,102	06-29-1993	Fedkiw, Jr. et al.	
	AM	US-5,399,745	03-21-1995	Yoneoka et al.	
	AN	US-5,401,873	03-28-1995	Zehner et al.	
	AO	US-5,770,761	06-23-1998	Lin et al.	
	AP	US-5,840,971	11-24-1998	Gubelmann-Bonneau	
	AQ	US-5,917,085	06-29-1999	Lippert et al.	
	AR	US-6,008,399	12-28-1999	Chang et al.	
	AS	US-6,015,875	01-18-2000	Smith, Jr. et al.	
	AT	US-6,232,490 B1	05-15-2001	Patois et al.	
KP	AU	6,379,507 B1	04-30-2002	Sato et al.	
	AV	6,399,812 B1	06-04-2002	Yan et al.	
	AW	6,447,745 B1	09-10-2002	Feeley et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
KP	AX	Al, Mamoru; "The Production of Methyl Formate by the Vapor-Phase Oxidation of Methanol"; <u>Journal of Catalysis</u> 1982, Vol. 77, pp. 279-288.	
KP	AY	HASAN, Masihul et al.; "Oxidation of primary alcohols to aldehydes with oxygen catalysed by tetra-n-propylammonium perruthenate"; <u>Journal of Molecular Catalysis</u> 2002, Vol. 180, pp. 77-84.	

Examiner Signature	/Karl Puttlitz/	Date Considered	01/08/2007
--------------------	-----------------	-----------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449B/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	10/633,299
		Filing Date	September 15, 2003
		First Named Inventor	Liu, Haichao
		Art Unit	1621
		Examiner Name	Not Yet Assigned
Sheet <u>9</u>	of <u>9</u>	Attorney Docket Number	02307V-139100US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
KP	AZ	Ji, Hong-Bing et al.; "Environmentally friendly alcohol oxidation using heterogeneous catalyst in the presence of air at room temperature"; <u>Catalysis Communications</u> 2002, Vol. 3, pp. 511-517.	
	BA	KAKIUCHI, Nobuyuki et al.; "Pd(II)-Hydrotalcite-Catalyzed Oxidation of Alcohols to Aldehydes and Ketones Using Atmospheric Pressure of Air"; <u>J. Org. Chem.</u> 2001, Vol. 66, pp. 6620-6625.	
	BB	LIU, Haichao et al.; "Synthesis of methylformate, dimethoxymethane, formaldehyde, and their mixtures via selective oxidation of methanol on RuO <sub>2</sub> -based catalysts"; <u>Department of Chemical Engineering, University of California at Berkeley</u> .	
	BC	LOUIS, Catherine et al.; "Catalytic Properties of Silica-Supported Molybdenum Catalysts in Methanol Oxidation: The Influence of Molybdenum Dispersion"; <u>Journal of Catalysis</u> 1998, Vol. 109, pp. 354-366.	
	BD	MALLAT, T. et al.; "Oxidation of alcohols with molecular oxygen on platinum metal catalysts in aqueous solutions"; <u>Catalysis Today</u> 1994, Vol. 19, pp. 247-284.	
	BE	MATSUMOTO, Masakatsu et al.; "Oxidation of Allylic Alcohols to Unsaturated Carbonyl Compounds by Ruthenium Dioxide and Dioxide/Ruthenium Dioxide"; <u>J. Org. Chem.</u> 1984, Vol. 49, pp. 3435-3436.	
	BF	MATSUSHITA, Tsuyoshi et al.; "Highly efficient oxidation of alcohols and aromatic compounds catalysed by the Ru-Co-Al hydrotalcite in the presence of molecular oxygen"; <u>Chem. Commun.</u> 1999, pp. 265-266.	
	BG	MUSAWIR, Mehdi et al.; "Highly efficient liquid-phase oxidation of primary alcohols to aldehydes with oxygen catalysed by Ru-Co oxide"; <u>Chem. Commun.</u> 2003, pp. 1414-1415.	
	BH	POULSTON, S. et al.; "Aerobic Oxidation of Alcohols with Palladium-Hydrotalcite"; <u>Platinum Metals Rev.</u> 2002, Vol. 46, No. 1, pp. 26.	
	BI	STUCHINSKAYA, Tatiana L. et al.; "Liquid-phase oxidation of alcohols with oxygen catalysed by modified palladium(II) oxide"; <u>Catalysis Communications</u> 2003, Vol. 4, pp. 417-422.	
	BJ	TRONCONI, Enrico et al.; "Methyl Formate from Methanol Oxidation over Coprecipitated V-Ti-O Catalysts"; <u>Ind. Eng. Chem. Res.</u> 1987, Vol. 26, pp. 1269-1275.	
	BK	VALENTE, N. Graciela et al.; "Structure and activity of Sn-Mo-O catalysts: partial oxidation of methanol"; <u>Applied Catalysis</u> 2001, Vol. 205, pp. 201-214.	
	BL	YAMAGUCHI, Kazuya et al.; "Creation of a Monomeric Ru Species on the Surface of Hydroxyapatite as an Efficient Heterogeneous Catalyst for Aerobic Alcohol Oxidation"; <u>J. Am. Chem. Soc.</u> 2000, Vol. 122, pp. 7144-7145.	
	BM	YAMAGUCHI, Kazuya et al.; "Supported Ruthenium Catalyst for the Heterogeneous Oxidation of Alcohols with Molecular Oxygen"; <u>Angew. Chem. Int. Ed.</u> 2002, Vol. 41, No. 23, pp. 4538-4542.	
	BN	YAMAGUCHI, Kazuya et al.; "Efficient Heterogeneous Aerobic Oxidation of Amines by a Supported Ruthenium Catalyst"; <u>Angew. Chem. Int. Ed.</u> 2003, Vol. 42, pp. 1480-1483.	
KP	BO	ZHAN, Bi-Zeng et al.; "Zeolite-Confined Nano-RuO <sub>2</sub> : A Green, Selective, and Efficient Catalyst for Aerobic Alcohol Oxidation"; <u>J. Am. Chem. Soc.</u> 2003, Vol. 125, pp. 2195-2199.	

Examiner Signature	/Karl Puttlitz/	Date Considered	01/08/2007
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.